

Amendments to the Specification:

Please replace the paragraph beginning at page 1, line 9, with the following redlined paragraph:

Current automotive embedded controller designs contain both a flash memory part for code and small amounts of EEPROM for calibrations and diagnostic information. Recent applications require storing large amounts of diagnostic freeze frames to save variables corresponding to system operating parameters, for example, in order to help in service diagnostic analysis on detection of a fault. Saving large amounts of data in EEPROM would require accepting the higher cost of larger and expensive chips, using more expensive flash devices that contain both flash and EEPROM cells, or using software emulation. The use of flash devices as replacement for EEPROMS are generally discussed in "EEPROM Replacement with Flash Memory, INTEL Application Note AP-685; "Using ~~Intel's~~ INTEL's Boot Block Flash Memory Parameter Blocks To Replace EEPROM", ~~Intel~~ INTEL Application Note AP-604; and AM29F200B Data Sheet from AMD.

Please replace the paragraph beginning at page 7, line 24, with the following redlined paragraph:

A pointer 34 may be stored at one or more fixed locations of the flash memory 18. For example, at the last word of the ~~second~~ sixth sector 26, such as illustrated in Figure 2B where the pointer 34 is stored in the last two bytes of sector 26, the low order byte of the pointer 34 stored at location 34a (i.e., 0x2FFFE) and high order byte stored at location 34b (i.e., 0x2FFFF). As described herein, the bits of the pointer 34 may indicate an address for sets of data stored at various locations in the memory 18. For example, a first set of data 36 may be stored in a first set 38 of contiguous memory locations having a starting address indicated by the first bit (i.e., 0 bit of low order byte at location 34a) of the pointer 34. In one embodiment, the position of the set bit may indicate an offset from some starting address.